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**Exhibit C****Discount and "Spread" Calculations By Drug Type and Competition**

	Count	Percentile	Reported as Discount from AWP*					Converted to Hartman "Spread"				
			10th	25th	50th	75th	90th	10th	25th	50th	75th	90th
<b>PAD</b>												
Single-Source	279		13.3%	17.0%	21.3%	29.5%	46.9%	15.3%	20.5%	27.1%	41.7%	88.4%
Multi-Source	314		15.5%	30.4%	59.5%	75.2%	85.4%	18.4%	43.7%	147.2%	302.7%	586.1%
Total	593		13.7%	19.3%	31.7%	64.0%	79.6%	15.8%	24.0%	46.4%	177.8%	390.2%
<b>SAD</b>												
Single-Source	285		12.0%	13.4%	16.8%	21.6%	26.9%	13.6%	15.5%	20.1%	27.6%	36.8%
Multi-Source	168		12.0%	14.3%	17.5%	24.9%	56.0%	13.6%	16.7%	21.2%	33.1%	127.5%
Total	453		12.0%	13.7%	17.0%	21.6%	39.6%	13.6%	15.9%	20.5%	27.6%	65.5%
<b>Total</b>												
Single-Source	564		12.0%	15.1%	19.2%	24.0%	40.2%	13.7%	17.7%	23.8%	31.6%	67.3%
Multi-Source	482		12.5%	17.5%	39.2%	69.5%	82.0%	14.2%	21.2%	64.4%	227.9%	455.6%
Total	1046		12.1%	15.9%	21.6%	48.3%	74.1%	13.8%	18.9%	27.6%	93.4%	285.6%

## Exhibit C: Notes

\*: Discounts are reported as the difference between AWP and acquisition cost, as a percentage of AWP (i.e.,  $\text{discount} = (\text{AWP} - \text{acquisition cost}) / \text{AWP}$ ). The "spread" metric employed by Dr. Hartman takes the difference as a percentage of acquisition cost (i.e.,  $\text{"spread"} = (\text{AWP} - \text{acquisition cost}) / \text{acquisition cost}$ ). Based on these formulae, the conversion from discount to "spread" is defined as:  $\text{spread} = \text{discount} / (1 - \text{discount})$ .

If a report lists the same data more than once, it is entered only once in the table.

If a report, article or testimony references data from an earlier source already in the table, that data is not entered again.

Only data that lists prices comparing AWP and some form of acquisition cost or list a discount rate based on similar comparisons are included in the table; for some reports listing Medicare reimbursement and an acquisition cost, AWP can be calculated from the reimbursement rate.

For those observations before 1998, the AWP was used as the Medicare reimbursement.

For those observations between 1998 and 2003, inclusive, and which reported Medicare prices and not AWP, calculated  $\text{AWP} = \text{Medicare Reimbursement} / 0.95$ .

For those observations from 2004 that have Medicare prices listed, AWP calculated one of two ways according to the MMA

For most drugs, reimbursement was set at 85 percent of AWP (as of April 2003), so  $\text{AWP} = \text{Medicare Reimbursement} / 0.85$ ;

Reimbursement for blood clotting factors; drugs that were not available for Medicare payment on April 1, 2003; vaccines; drugs for ESRD; and infusion drugs used with DME remained at 95 percent of AWP (as of October 2003), so  $\text{AWP} = \text{Medicare Reimbursement} / 0.95$ .

If a report lists a range of prices, two observations are listed: one for the minimum and one for the maximum. For example, if acquisition cost is reported as the range between \$1.00 and \$2.00 and AWP is reported at \$3.00, then one observation will have acquisition cost = \$1.00 and  $\text{AWP} = \$3.00$  and the second observation will have acquisition cost = \$2.00 and  $\text{AWP} = \$3.00$ .

A drug is flagged as a physician administered drug (PAD) if covered by Medicare Part B. Included are the following:

Injectable drugs which are mostly administered by the physician (i.e., insulin is not included);

Drugs administered using durable medical equipment (DME), which includes inhalation drugs (e.g., albuterol, ipratropium bromide);

Immunosuppressive drugs;

Oral anti-cancer drugs that have an injectable form;

Oral anti-emetic drugs, which are those drugs that are used in cancer treatment to prevent nausea;

Synthroid injection (Synthroid injection is reimbursed as a PAD if the physician provides a statement explaining why the oral formulation could not be used);

Those drugs not listed under Medicare Part B but which are primarily provided in injectable form are also classified as PAD, with an exception for insulin products.

A drug is flagged as multi-source if it is listed so in the source material. If the report doesn't identify the drug as single or multiple source, then other sources are referenced to determine whether there is more than one drug with the same active ingredient (from different manufacturers, excluding co-promotional or co-marketing agreements). Principal research sources include the FDA Orange Book, the Drugs@FDA website, news releases, and company reports and financial filings.

In general, a drug is considered multi-source if generic equivalents are available; otherwise the drug is considered single-source. Special cases include:

Biologics are all treated as single-source (including Albumin, Botulinum, Hepatitis B Vaccine, Immune Globulin, and Pneumococcal Vaccine);

A generic version of paclitaxel was released in September of 2000; any observations of paclitaxel for that year are flagged as single source;

Albuterol, co-marketed by GSK and Schering-Plough as Ventolin and Proventil, is considered as single-source until generic entry in 1992;

Epoetin Alfa (EPO), co-marketed by J&J and Amgen as Procrit and Epogen, is considered single-source;

Hydopres, whose formula includes reserpine and hydrochlorothiazide, is considered multi-source because each of those molecules was multi-source.

All EPO data is included; EPO is reimbursed differently depending on HCPCS codes (Q0126 for non-ESRD; Q9920-9940 for ESRD).

**Exhibit C: Sources**

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General Accounting Office, <i>Medicare: Payments for Covered Outpatient Drugs Exceed Providers' Cost</i> , GAO-01-1118, September 2001.	41
Office of the Inspector General, <i>Excessive Medicare Reimbursement for Albuterol</i> , OEI-03-01-00410, March 2002.	6
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	<b>1046</b>

## Exhibit D

## Pharmaceutical Pricing Terms

Price Term	Short Description	Common Usage of the Term	Publicly Available
340B Price	PHS Act drug discount program, 340B Ceiling Price	The 340B price is the maximum price that manufacturers can charge (for direct sales and sales through wholesalers) to "covered entities," which include eleven categories of facilities and programs funded by the Health Resource & Services Administration (HRSA), including disproportionate share hospitals (DSH) owned by or under contract with state or local governments, federally qualified health centers (FQHC) and AIDS drug assistance programs (ADAP). Although wholesalers may charge covered entities a reasonable distribution fee, manufacturers must ensure that the discount is passed on to the covered entities. In order to receive reimbursement under Medicaid, manufacturers must also provide their covered drugs under 340B. The 340B price is calculated quarterly as the AMP minus a discount, where the discount is determined using the Medicaid rebate formula. Drugs purchased under 340B are not eligible for Medicaid rebates. Established by Section 340B of the Public Health Service Act (PHS Act) as a result of the Veterans Health Care Act of 1992 (VHCA).	No
ASP	Average Sales Price	Established by the Medicare Modernization Act of 2003, ASP is the statutorily defined price for drugs covered under Medicare Part B. Calculated using actual sales transactions, the manufacturer's average sales price includes sales to all purchasers other than sales exempt from Medicaid Best Price and sales at nominal charges. ASP is calculated quarterly by manufacturers as a weighted average price, net of volume discounts, prompt pay discounts, cash discounts, free goods that are contingent on any purchase requirement, chargebacks and rebates (excluding Medicaid rebates).	Yes
Best Price	Medicaid Best Price	In calculating the Medicaid "best price," manufacturers must (1) include cash discounts, free goods contingent upon purchase requirements, volume discounts, and rebates, (2) determine price without regard to special packaging, labeling, or identifiers on the dosage form or product package, and (3) not take into account prices that are nominal in amount (i.e., equal or less than 10 percent of AMP). Best price calculations exclude prices charged to entities covered under the VHCA (i.e., 340B, FCP, FSS, VA NCP), state drug assistance programs, single-award contract prices paid by any federal agency, and Medicaid supplemental rebates. For bundled sales, discounts are allocated in proportion to the dollar value of the units of each drug sold under the bundled arrangement. Best Prices are calculated quarterly by manufacturers and submitted to CMS within 30 days of the end of the calendar quarter. Established by OBRA 1990.	No
FCP	Federal Ceiling Price	The FCP is the maximum price that manufacturers can charge for drugs purchased by the Veterans Administration (VA), Department of Defense (DOD), Public Health Service (PHS) (including the Indian Health Service), and the Coast Guard. In order to receive reimbursement under Medicaid, manufacturers must also make available their covered branded drugs to the four protected agencies under the FCP at a discount of at least 24%, below the non-FAMP, minus any cash discounts, rebates, or similar reductions. Manufacturers must offer an additional discount if their FSS prices rise faster than the CPI-U. Does not include noninnovator multiple-source or generic drugs. Established by Section 603 of the Veterans Health Care Act of 1992.	No
FSS	Federal Supply Schedule Price	The Federal Supply Schedule is a price list for the approximately 23,000 drugs that are available to federal purchasers. FSS prices are intended to be no greater than the prices paid to manufacturers by their "most-favored" nonfederal customers under similar terms and conditions. Because terms and conditions of nonfederal sales can vary by drug, the most-favored customer price may not be the lowest price in the market. The Veterans Health Care Act of 1992 requires that manufacturers must list their covered branded pharmaceutical products on the FSS in order for them to be covered by Medicaid. The VA's National Acquisition Center (NAC) is the sole government negotiator with manufacturers in establishing prices for the approximately 23,000 drugs listed on the FSS.	Yes
FUL	Federal Upper Limit	Medicaid reimbursements to a retail pharmacy for multiple source drugs on the FUL list must not exceed, in the aggregate, payment levels determined by applying to each drug entity a reasonable dispensing fee (established by the State and specified in the State plan), plus an amount based on the limit per unit that CMS has determined to be equal to 150 percent applied to the lowest price listed (in package sizes of 100 units, unless otherwise noted) in any of the published compendia of cost information of drugs. Established in 1987, the FUL list was initially restricted to multi-source drugs with at least three therapeutically equivalent drug products (according to the Orange Book). The FUL list is based on price data from First Data Bank (Blue Book), Medi-Span, the Red Book and the CMS State Medicaid Manual, and is updated twice annually.	Yes
MAC	Maximum Allowable Cost	A MAC list sets an upper bound on the reimbursement to a pharmacy or provider for drugs based on a particular drug product regardless of whether the drug is branded or generic. MACs are used extensively by private insurers, PBMs, and by some state-run health programs. States have the option of establishing their own MAC lists for the Medicaid program as long as their payment ceilings are not in excess of the Federal Upper Limit (FUL). In practice, state MAC lists generally contain more drugs and designate lower prices than the FUL list. States use several methods for setting MACs, including 1) setting MAC at the level of the lowest priced generic equivalent of the drug, 2) setting MAC based on actual acquisition cost surveys, or 3) setting MAC at the FUL. Several states have implemented MACs for PADs (e.g., FL, MT, WI).	Yes/No
Nominal Price	Nominal Price	The Medicaid Best Price calculation excludes sales at nominal prices, which are defined to be sales at prices less than 10% of the Average Manufacturer Price (AMP). The VA interprets "nominal" to be pricing, "designed to benefit the public by financially aiding disadvantaged, not-for-profit covered drug dispensaries or researchers using a drug for an experimental or non-standard purpose." <sup>18</sup> Therefore, the VA's Non-FAMP includes sales to commercial entities at nominal prices.	No

**Exhibit D**  
**Pharmaceutical Pricing Terms**

Price Term	Short Description	Common Usage of the Term	Publicly Available
Non-FAMP, NFAMP	Non-Federal Average Manufacturer's Price	The Non-FAMP is the weighted average price paid by wholesalers to a manufacturer for drugs distributed to non-federal purchasers. The Non-FAMP is calculated quarterly and annually by manufacturers under their master agreement with the VA based on purchases over the previous 12 months. The non-FAMP includes sales at nominal prices to commercial entities. It also includes free drug samples "when they are contingent on written upon verbal commercial agreements." <sup>18</sup> The non-FAMP was established by Section 603 of the Veterans Health Care Act of 1992.	No
U&C price	Usual and Customary price	Usual and customary prices are the undiscounted prices that cash-paying individuals without insurance coverage would pay at the retail pharmacy counter. Also called the "cash price."	Yes <sup>ii</sup>
VA NCP	VA National Contract Price	The price the VA obtains for the "Big 4" agencies (the VA, Department of Defense, Public Health Service, and Coast Guard) through competitive bids from manufacturers for selected drugs in exchange for their inclusion in the VA formulary. NCP prices are lower than FSS prices. National contracts are usually for a one-year term with four one-year options to extend the contract. The VA has been undertaking a standardization process that selects a specific drug(s) within a therapeutic class for inclusion on its national formulary, balancing clinical preferences with concentrated buying power.	Yes <sup>iii</sup>

**Notes**

- i. While state and federal MAC lists are generally available to the public, private payor and PBM MAC lists are generally considered proprietary.
- ii. Available to the public, but not usually reported/published.
- iii. Not all drugs have National Contracts.

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## Exhibit E

## Payor Vertical Integration

Payor <sup>1</sup>	US Covered Lives	MA Covered Lives	Vertical Integration into Drug Purchasing <sup>54</sup>				
			Mail Order Pharmacy	Specialty Pharmacy	Captive PBM	Staff Model HMO	Hospital Ownership
Aetna <sup>2</sup>	19,029,000	160,211	X <sup>24,25</sup>	X <sup>34</sup>	X <sup>24,25</sup>	X <sup>50</sup>	
Anthem <sup>3,22</sup>	6,243,000	N/A		X <sup>32,33</sup>	X <sup>25,27,28</sup>	X <sup>46</sup>	
BCBS of Massachusetts <sup>4</sup>	2,076,178	900,984				X <sup>31</sup>	
BCBS of Minnesota <sup>5</sup>	1,812,642	N/A			X <sup>27,28</sup>		
CIGNA <sup>6</sup>	14,231,000	90,169	X <sup>24,27,29</sup>	X <sup>21,34</sup>	X <sup>25,27</sup>	X <sup>29,30,42</sup>	
Coventry <sup>7</sup>	1,518,622	N/A				X <sup>38</sup>	
Fallon Community Health Plan <sup>8</sup>	192,385	192,385				X <sup>48</sup>	
Harvard Pilgrim <sup>9</sup>	1,191,594	637,493				X <sup>43,53</sup>	
Health Net <sup>10</sup>	3,354,000	N/A			X <sup>25,27</sup>		
Health New England, Inc. <sup>11</sup>	75,437	75,437					X <sup>52</sup>
Highmark <sup>12</sup>	150,000	N/A		X <sup>32</sup>			
HIP New York <sup>13</sup>	662,484	N/A				X <sup>49</sup>	
Humana <sup>14,15</sup>	3,652,800	N/A		X <sup>26</sup>	X <sup>25</sup>	X <sup>14,45</sup>	X <sup>37</sup>
John Deere Health <sup>16</sup>	388,449	N/A				X <sup>51</sup>	
Kaiser <sup>17</sup>	8,100,000	N/A			X <sup>27,28</sup>	X <sup>35,44</sup>	X <sup>36</sup>
PacificCare <sup>18,21</sup>	4,117,900	N/A			X <sup>25,27</sup>	X <sup>47</sup>	
United HealthCare <sup>19,21</sup>	15,717,997	74,116			X <sup>25,40,41</sup>	X <sup>39</sup>	
Wellpoint <sup>20,22</sup>	10,218,518	N/A	X <sup>24,27</sup>	X <sup>34</sup>	X <sup>25,27,28</sup>		
Subtotal	92,732,006	2,130,795					
Total <sup>23</sup>	180,385,780	2,889,689					
Percent of Total	51%	74%					

## Notes

- Other payors outside of Massachusetts that are vertically integrated include BCBS of Michigan, BCBS of New Jersey, Capitol Health Plan, Group Health of Puget Sound, HAP of Michigan, Intermountain Health Care, and The Regence Group. "Health maintenance organizations listed- Michigan", Business Insurance, Dec. 1990 (referencing BCBS of Michigan); "Health maintenance organizations listed- New Jersey", Business Insurance, Dec. 1990 (referencing BCBS of New Jersey); "Horizon Blue Cross Blue Shield of New Jersey: Current and Historical Role in Providing Health Insurance Coverage in New Jersey", Rutgers Center for State Health Policy, February 2003 (referencing BCBS of New Jersey-aka Horizon BCBS); Denn, James, "CHP has a strong hold on managed health care", Times Union (Albany, NY), Feb. 26, 1995 (referencing Capitol Health Plan); Don Glickstein, "Group Health Cooperative of Puget Sound - A Short History", The Permanente Journal (referencing Group Health of Puget Sound); "Should You Take Managed Care Out of Integrated Delivery Systems", Cain Brothers, Vol. 40, Spring 2003 (referencing HAP of Michigan); Deposition of Eric Cannon, September 13, 2004, pp. 24, 43 (referencing IHC); Regence Rx, "Regence Rx Website, available at <http://www.regencerox.com/meet/index.html> (referencing the Regence Group).
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30. Deposition of Jill Herbold, January 14, 2005, p. 63. Cigna owns one physician group in Phoenix Arizona.
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33. "Specialty Pharmacy Market Offers Expansion Opportunity for PBMs," *Drug Cost Management Report*, September 12, 2003.
34. Carroll, John, "Plans Struggle for Control of Specialty Pharma Costs," *Managed Care*, September 2005. Operated a specialty pharmacy at least as early as 2004.
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36. Structure of Kaiser Permanente, available at [http://members.kaiserpermanente.org/kpweb/structurekp/deta...lapp/feature/123structurekp/Fast\\_facts\\_national\\_page2.html](http://members.kaiserpermanente.org/kpweb/structurekp/deta...lapp/feature/123structurekp/Fast_facts_national_page2.html), accessed 2/15/2006.
37. "Humana History," Humana Website, available at <http://www.humana.com/corporatecomm/companyinfo/history.asp>. Humana Owned hospitals until 1993 when it spun off its hospital operations into Galen Health Care Inc., which later merged with Columbia/HCA.
38. "Coventry Corporation Names Rusty Hailey Vice President, Specialty Markets," *Business Wire*, June 23, 1994; "HealthCare USA Signs Strategic Merger Agreement with Coventry Corp.," *Business Wire*, February 6, 1995. "Coventry Corp. is one of the fastest growing HMOs in the country and for three consecutive years has been recognized by FORTUNE magazine as one of the fastest growing public companies in America. Health care is delivered to its 550,000 members through a combination staff model and IPA (Individual Practice Association)." "Health Maintenance Organizations Listed - Pennsylvania," *Business Insurance*, 1990, HMOs, p. 57. Coventry sold its staff-model HMO in 1997, deposition of J. Russell Hailey, Coventry Healthcare, Inc., August 4, 2004.
39. "United Healthcare Signs Definitive Agreement to Purchase Ramsay-HMO," *PR Newswire*, February 15, 1994. "United HealthCare Corporation (NYSE: UNH) and Ramsay-HMO, Inc. (NYSE: RMO) said today they have signed a definitive agreement under which United HealthCare will acquire Ramsay-HMO. Ramsay-HMO, which is based in Coral Gables, Fla., owns and operates a 172,000-member, predominantly staff-model, HMO serving the South Florida community in the Miami, Ft. Lauderdale and Palm Beach areas, including its recently announced entry into the Orlando market through the acquisition of Genesis Health Systems, Inc."
40. "About UnitedHealth Group: History & Innovation," UnitedHealth Group Website, available at <http://www.unitedhealthgroup.com/about/inn.htm>. In 1988 "United HealthCare incorporates the first pharmacy benefits management company, Diversified Pharmaceutical Services Inc."
41. United Sold its PBM in 1994. Ratner, Jonathan, *Pharmacy Benefit Managers - Early Results on Ventures with Drug Manufacturers*, GAO Reports, GAO/HEHS-96-45, November 9, 1995.
42. "Health Maintenance Organizations Listed - California," *Business Insurance*, December 18, 1991, 1991-1992 *Managed Care Market Report - HMOs*, p. 16.

**Exhibit E****Payor Vertical Integration**

43. Stein, Charles, "Harvard Community, Pilgrim Eye Merger," Boston Globe, July 23, 1994, Metro-Region, p. 1. "Harvard Community, based in Brookline, was founded in 1969 as a staff model health maintenance organization. Harvard has its own salaried doctors who see patients at centers around Greater Boston. Over the years Harvard has branched out by buying group medical practices." See, also, Stein, Charles, "Top Quality HMOs not Rated the Most Popular," Boston Globe, April 2, 1996, Economy, p. 37; and 1998 Annual Report, A Year in the Life of the Health Care System, CSHSC, July 1999. "Harvard Vanguard Medical Associates, a 600-physician multi-specialty group practice, spins off from its long-time owner, the Harvard Pilgrim Health Plan."
  44. Hall, Ken, "As HMOs Mature, Changes are on the Horizon," Business Dateline: Intecorp, Vol. 5, No. 3, February 7, 1986, Sec. 1, p. 15. "Kaiser Permanente Medical Care Program -- About 26,000 people in Connecticut and 27,000 in Westchester County belong to the Northeast Permanente Medical Group, the regional affiliate of this group model HMO. The group HMO is virtually indistinguishable from the staff model to members and employers. The difference is in the relationship the participating physicians have with the HMO itself. Kaiser's physicians are not employees of the health plan, as they would be with a staff model HMO. Rather, they are a private corporation unto themselves, contractually bound to Kaiser to provide medical care for members of the plan. There are about 40 physicians in the Northeast Permanente Medical Group. There are an additional 250 "physician-specialist-consultants" who are contracted to provide occasional services when necessary. The Group has about 1,100 employees."
  45. "Humana, Community Health Plan Sign Definitive Agreement for Humana's Acquisition of Ohio HMO," PR Newswire, November 8, 1990, Financial News.
  46. "Health Maintenance Organizations Listed - Connecticut," Business Insurance, December 1990, HMOs, p. 25. Characterizes Community Health Care Plan as a staff model HMO affiliated with BCBS of Connecticut. BCBS of Connecticut merged with Anthem in August 1997, Earls, Bill, "Blue Cross Merger Approved: What does it mean, Middlesex Magazine & Business Review," Vol. 4, No. 9, September 1997, p. 38.
  47. Prince, Michael, "Competition Driving Staff Model HMOs to Evolve," Business Insurance, August 5, 1996, News, p.6. Characterizes FHP International Corp. as having a staff model HMO from 1961 until about 1996. PacifiCare and FHP operations were merged in 1997, "PacifiCare: To Integrate FHP Operations in California," American Health Line, August 4, 1997, Managed Care Monitor.
  48. See, for example, Pappas, Christina L., "Prescription for a Competitive HMO Market," Business Worcester, Vol. 7, No. 2, March 21, 1988; Phelps, Richard, "Fallon Clinic, Primary Care Physicians Merge, Business Worcester, Vol. 8, No. 11, July 24, 1989, Sec. 1, p. 1.; and Stein, Charles, "Top Quality HMOs not Rated the Most Popular," Boston Globe, April 2, 1996, Economy, p. 37. While Fallon Community Health Plan is not technically considered staff model, the Fallon Clinic operates the Fallon Community Health Plan.
  49. Robinson, James C., "The Future of Managed Care Organization," Health Affairs, Vol. 18, March/April 1999, pp. 7-24.
  50. See, for example, Levick, Diane, "Insurers Investing in Medical Practices," The Hartford Courant, August 29, 1993, Sec. A, p. 1; Viles, Peter, "Part II: Managed Care is Industry's Answer to Health Care Costs," The Associated Press, January 22, 1991; "Medcenters of North Dakota, Heart of America HMOs to Explore Combining Operations," Southwest Newswire, April 27, 1987; PR Newswire, Minneapolis, January 24, 1985; "Medcenters of North Dakota and Capcare Merge," Southwest Newswire, March 6, 1987. Aetna sold its physician practices to Medpartners in 1997, Gaynor, Martin and Deborah Haas-Wilson, "The Blessing and the Curse of Managed Care-Vertical Relations in Health Care Markets," Paper Prepared for the AEI Conference "Managed Care and Changing Health Care Markets," Washington D.C. April 10, 1997, July 16, 1998, p. 2.
  51. Deposition of Carol Sidwell (John Deere Health), September 17, 2004, pp. 40-46. John Deere Health had a staff model HMO from approximately 1993-1999.
  52. See, for example, "Report: Baystate not Breaking Antitrust Laws," The Associated Press State & Local Wire, October 3, 2001.
  53. Deposition of James Kenney, September 20, 2004, pp. 7-11. Harvard Pilgrim owned physician clinics and pharmacies. Harvard Pilgrim purchased drugs either directly or from a wholesaler. The Staff Model HMO became a group model practice "a few years ago". On Pages 12-13 of his deposition, James Kenney says that Harvard Pilgrim acquired brand name drugs from manufacturers at 2-50% off WAC, while they purchased generic drugs at 50-80% off WAC.
  54. This exhibit displays information on payors who were involved in drug purchasing for which enrollment information is readily available.
- N/A These payors do not cover any lives in Massachusetts.

**Exhibit F****Physician Acquisition Cost Calculation**

This formula specifies a methodology for estimating physician acquisition costs for any product using data generally available to pharmaceutical companies. Physician acquisition costs reflect sales to physicians (directly, or through wholesalers, specialty distributors, or physician GPOs) net of price concessions. Application of the formula may vary by company and product depending on data collection methodologies, information systems, types of contracts, etc. The formula should be adapted as needed to account for any such unique circumstances, and the circumstances and differences from the general formula should be documented.

Add Sales to Direct Purchasers <sup>1</sup>		Dollars	Units	Comment
Direct sales to physicians		A	AA	It is expected that most sales to physicians will be at a contracted price and will accordingly generate a chargeback record. To the extent there are physician sales that do not generate a chargeback, the company will need to estimate the magnitude of such sales and include them in B, BB, C, and CC.
Sales to wholesalers		B	BB	
Sales through physician / specialty distributors		C	CC	
Total Sales		D = sum(A:C)	DD = sum(AA:CC)	
Less Purchases by Non-Physicians				
Sales through wholesalers to hospitals		E	EE	Direct sales to hospitals need not be included above or deducted here.
Sales through wholesalers to retail pharmacies		F	FF	Direct sales to retail pharmacies need not be included above or deducted here.
Sales through wholesalers to government institutions (e.g., VA/DOD)		G	GG	
Sales through wholesalers to other non-physicians (e.g., home health, specialty pharmacies, LTC, etc.)		H	HH	
		I = sum(E:H)	II = sum(EE:HH)	
Less Price Concessions <sup>2</sup>				
Chargebacks (limited to physician purchases)		J	JJ	
Rebates paid directly to physicians		K	KK	
Rebates to specialty / physician distributors		L	LL	
Rebates to physician GPOs		M	MM	
Prompt pay discount		N (= I * 2%)		Assumed 2% for all manufacturers, products, and purchasers.
Total Deductions		O = sum(J:N)		
Physician Acquisition Cost		P = (D - I - O) / (DD - II)		

**Notes**

<sup>1</sup> Assumed to be net of returns.

<sup>2</sup> Admin fees are assumed to be for services provided and are not deducted as price concessions. To be conservative, this calculation does not attempt to account for any additional markup by distributors. Such a markup may be appropriate for products requiring special handling.